CULTURAL RESOURCES SURVEY OF THE CULEBRA ROAD AND LOOP 1604 6.8-ACRE PROPERTY, BEXAR COUNTY, TEXAS

Prepared for

SEA ISLAND SHRIMP HOUSE

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ABSTRACT

This report discusses a cultural resources survey conducted by SWCA Environmental Consultants (SWCA) on behalf of the Sea Island Shrimp House of a proposed 6.8-acre property land development. The project area is located north of Culebra Road (FM 471) and south of Culebra Creek, approximately 0.3 miles east of the Loop 1604 and Culebra Road intersection in north-western Bexar County, Texas. The project was conducted in compliance with the City of San Antonio's Historic Preservation and Design Section of the Unified Development Code. The investigations consisted of a literature and records background review and an intensive pedestrian survey, including ground surface inspection and shovel testing. The purpose of the investigation was to identify, record, and delineate any cultural resources within the project area, and if possible determine the significance of such.

The background review revealed no previously conducted archaeological surveys or previously recorded archaeological sites within the project area. However, there are four previously conducted surveys, one previously conducted testing project, and five previously recorded archaeological sites located within a one mile radius of the project area. Of the sites, 41BX1465 is located immediately adjacent to the project area overlooking Culebra Creek. The site is described as a prehistoric open campsite/lithic quarry site composed of mainly lithic debitage and cores, as well as some evidence of lithic tools.

The SWCA field investigations revealed the northern and eastern portions of the project area have been heavily disturbed by the displacement of soils, as well as vegetation clearing, associated with quarry and gravel pit activities. However, previously recorded site 41BX1465 was found to extend east/southeast into the undisturbed portions of the project area. Surficial and subsurface investigations revealed that the site has little or no research value due to a limited artifact frequency, no temporally diagnostic artifacts or cultural features, and lack of integrity. As a result, while the Sea Island Shrimp House commercial development will have an effect on 41BX1465, the site is not considered significant. Consequently, no further archaeological investigations are recommended. No cultural materials were collected during the investigations and no artifacts were curated.

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MANAGEMENT SUMMARY

PROJECT TITLE: Cultural Resources Survey of the Culebra Road and Loop 1604 6.8-acre Property, Bexar County, Texas.

SWCA Project Number: 12029-053-AUS.

PROJECT DESCRIPTION: The 6.8-acre Culebra Road (FM 471) and Loop 1604 project area is proposed for commercial development. SWCA conducted a background literature and records review and an intensive pedestrian survey with ground surface inspection and shovel testing of the project area. The purpose of the survey was to determine if any significant cultural resources exist within the project area that will be impacted by the proposed development project.

LOCATION: The project area is located north of Culebra Road (FM 471) and south of Culebra Creek, approximately 0.3 miles east of the Loop 1604 and Culebra Road intersection in northwestern Bexar County, Texas. The roughly rectangular shaped tract is bordered on the north and east by private property lines, on the south by Culebra Road, and on the west by the Korean Han-Ma-Eum Baptist Church. The project area appears on the Culebra Hill, Texas (2998-243) USGS 7.5-minute topographic quadrangle map.

Number of Acres Surveyed: 6.815 acres.

PRINCIPAL INVESTIGATOR: Kevin A. Miller.

DATES OF WORK: October 19, 2006.

PURPOSE OF WORK: The project sponsor is fulfilling regulatory requirements in association with the City of San Antonio's Historic Preservation and Design Section of the Unified Development Code.

NUMBER OF SITES: One previously recorded site, 41BX1465, was identified within the project area.

CURATION: No artifacts were collected, and nothing was curated.

COMMENTS: The survey encountered one previously recorded site, 41BX1465, extending into a large portion of the project area. However, the site within the project area is lacking integrity with limited artifact frequency, lack of temporally diagnostic artifacts or cultural features, and disturbances from recent development associated with quarry and gravel pit activities. Based on these findings, site 41BX1465 has little to no research value and the proposed commercial development project will have no effect on any significant cultural resources. As a result, no further archaeological investigations are recommended.

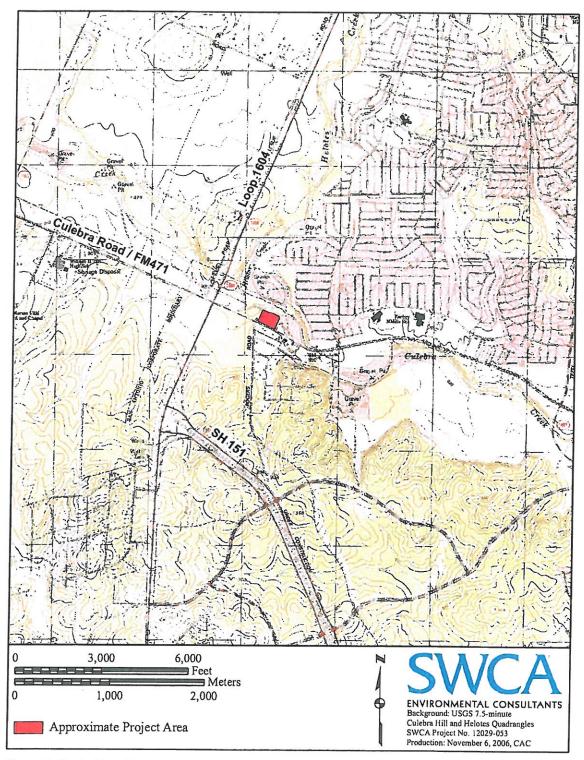


Figure 1. Project location map.

INTRODUCTION

SWCA was contracted by Sea Island Shrimp House to conduct a cultural resources survey of the Culebra Road and Loop 1604 6.8-acre proposed land development tract in northwestern Bexar County, Texas. The investigations were conducted to assist in complying with the City of San Antonio's Historic Preservation and Design Section of the Unified Development Code.

The investigations were comprised of an archaeological background records and literature review and an intensive pedestrian survey, including ground surface inspection and shovel testing of the project area. The purpose of the survey was to determine if any significant cultural resources exist within the project area and would be adversely affected by the proposed commercial development project. Kevin A. Miller served as the Principal Investigator, with Mercedes C. Cody and Josh E. Gibbs conducting the fieldwork for the survey on October 19, 2006.

DEFINITION OF STUDY AREA

The Sea Island Shrimp House project area is located north of Culebra Road (FM 471) and south of Culebra Creek, approximately 0.3 miles east of the Loop 1604 and Culebra Road intersection in northwestern Bexar County, Texas (Figure 1). The 6.8-acre property tract is roughly rectangular in shape with its southern boundary adjacent to Culebra Road. The eastern and northern boundaries are private property lines. The property west of the project area is owned and occupied by the Korean Han-Ma-Eum Baptist Church. The project area is located on the Culebra Hill, Texas (2998-243) USGS 7.5-minute topographic quadrangle map.

A large amount of residential, commercial, and roadway development surround the project area, which is situated along an upland landform and nearly level alluvial terrace south of and overlooking Culebra Creek. The western portion of the project area is densely vegetated, while the eastern portion of the project area is a quarry and gravel pit area. Additional disturbances specific to the project area include a two-track road/trail, vegetation clearing, fence lines, bioturbation, and natural erosion.

ENVIRONMENTAL SETTING

GEOLOGY

The geology of the project area is mapped as Quaternary-age fluviatile terrace deposits (Barnes 1983). These deposits consist of gravel, sand, silt and clay (Barnes 1983).

Soils

The soils are mapped as Lewisville silty clay, 1 to 3 percent slopes. These soils consists of alluvial deposits with silty clay and limestone gravels, and occur on long, narrow, sloping areas that separate nearly level terraces from soils on the uplands (Taylor et al. 1991). The surface layer consists of dark grayish brown clay, 20 inches thick and the subsoil is limy, brown clay, 17 inches thick (Taylor et al. 1991).

VEGETATION

The project area lies in the Edwards Plateau, west of the Balcones Escarpment, and is dominated by a mixed live oak (Quercus texana) and Ashe's juniper (Juniperus ashei) woodland interspersed with occasional grassy openings (Van Auken 1988). The creek channel itself contains a thin riparian zone of vegetation. The vegetation includes live oak, juniper, and mesquite, with an understory of prickly pear cacti, agarita, yucca, and grasses.

CULTURAL HISTORY

The project area lies at the interface of two broad archaeological regions, South Texas and Central Texas. As evident in the artifact assemblages from the San Antonio area, cultural influences fluctuated over time. The following culture history emphasizes Central Texas regional patterns as the best fit for the study area, although reference is made to important developments and trends in South Texas. The following discussion draws primarily from the chronologies proposed by Collins (1995). Johnson and Goode (1994), and Black (1989) for Central Texas, with observations from Hester (1995) for South Texas. The cultural sequence is divided into four periods: Paleoindian, Archaic, Late Prehistoric, and Historic. The Archaic period is subdivided into four subperiods: Early, Middle, Late, and Transitional.

PALEOINDIAN PERIOD

Paleoindian artifacts and sites date from about 11,500-8800 B.P. and are not uncommon in Central Texas (Collins 1995). The period begins during the close of the Pleistocene with the earliest evidence of humans in the Central Texas region. Diagnostic artifacts of the period include lanceolate shaped, fluted projectile points such as Clovis, Folsom, and Plainview. These projectile points were hafted onto wooden spears. launched from (spearthrowers), and often used to hunt big game such as mammoth, mastodons, bison, camel, and horse (Black 1989). During the Paleoindian period, subsistence strategies gradually changed to include increased harvesting of flora and small game as the big game died off and the climate warmed following the end of the Pleistocene ice age. Most Paleoindian artifacts in the area are recovered as either isolated surface finds or within surface lithic scatters lacking good stratigraphic

context (e.g., Howard 1974; Meltzer and Bever 1995).

ARCHAIC PERIOD

As the Paleoindian period came to an end, humans began to harvest more intensively local floral and faunal resources (Collins 1995). Material culture became more diverse, and the use of burned rock middens and ovens became widespread. This period is known as the Archaic and dates from approximately 8800 to 1200 B.P. in Central Texas (Collins 1995; Johnson and Goode 1994). While Collins (1995) and Johnson and Goode (1994) subdivide the Archaic into Early, Middle, and Late subperiods, this report recognizes the Transitional Archaic as the final subperiod of the Archaic.

EARLY ARCHAIC

Early Archaic artifacts and sites date from about 8800 to 6000 B.P. (Collins 1995). Once thought to be Paleoindian in age, some unstemmed point types such as Angostura have recently been recognized as the first Early Archaic diagnostic styles (Collins 1995). By about 8000 B.P., these points were replaced by stemmed varieties such as Early Split Stem, Martindale, and Uvalde (Black 1989; Collins 1995). Most sites were open campsites, although cave sites have also been found (Collins 1995). Current site distribution data suggest that Early Archaic peoples were concentrated along the eastern and southern margins of Edwards Plateau in areas with more stable water sources (Collins 1995; McKinney 1981). Specialized tools, perhaps used in woodworking, known as Guadalupe and Neuces bifaces, were prevalent in this period (Collins 1995). While subsistence data are sparse, it appears that people were hunting deer and other small animals, fishing, and cooking bulbs in earth ovens (Collins 1995). This strategy evolved, in part, due to the extinction of megafauna and the changing climate at the beginning of the Holocene (McKinney 1981).

MIDDLE ARCHAIC

Middle Archaic artifacts and sites date from about 6000 to 4000 B.P. Characteristic Middle Archaic projectile points include Bell, Andice, Taylor, Nolan, and Travis, several of which are deeply notched (Black 1989). These artifacts could have served as knives and projectile points. Bison were hunted intensively at the start of the Middle Archaic, but, as the climate became drier, a reliance on dry climate plants such as sotol probably became common. The end of the Middle Archaic may have been the most xeric conditions ever in Central Texas (Collins 1995). The climatic change was accompanied by a technological change as Nolan and Travis points, which are thick and have narrow blades, first appear in the archaeological record (Collins 1995). Burned rock middens and earth ovens first appeared ca. 5000 B.P. and became increasingly common, although their exact functions may have varied based on the culture and environment (Johnson and Goode 1994). Representative sites of the Texas Middle Archaic include the Landslide, Wounded Eye, Gibson, and Panther Springs sites (Collins 1995).

LATE ARCHAIC

Late Archaic artifacts and sites date from about 4000 to 2250 B.P. The period began with very xeric conditions but gradually became more mesic (Collins 1995). Characteristic dart point types include Bulverde, Pedernales, Marshall, and Marcos (Collins 1995). Increasingly complex and sedentary cultural manifestations first appeared in the Late Archaic. Sites of the Late Archaic are very common and include burned rock middens, open campsites, and lithic procurement sites. Large cemeteries indicate population increases. Also, trade and exchange networks between

cultures appear to have increased in complexity based on the presence of exotic goods in sites and cemeteries (Black 1989). Bement (1991) interprets the evidence for group investment in the Thunder Valley sinkhole cemetery, dated to 2900 B.P. based on stratigraphy, to indicate that groups were declaring control over a particularly territorial range during the Late Archaic.

TRANSITIONAL ARCHAIC

As Collins (1995:384-385) notes, "diverse and comparatively complex archeological manifestations toward the end of the Late Archaic attest to the emergence of kinds of human conduct without precedent in the area." This period (2250-1250 B.P.) is referred to as the Transitional Archaic (Turner and Hester 1993). During the Transitional Archaic, smaller dart point forms such as Darl, Ensor, Fairland, and Frio were developed (Turner and Hester 1993). These points were probably ancestral to the first Late Prehistoric arrow point types and may have overlapped temporally with them (Hester 1995). Several researchers believe that the increased interaction between groups at the end of the Late Archaic was an important catalyst for cultural change (Collins 1995; Johnson and Goode 1994).

LATE PREHISTORIC

By the end of the Transitional Archaic, the bow and arrow technologies were introduced, indicated by the increasingly smaller size of projectile points. The subsequent period is now commonly referred to as the Late Prehistoric period (Black 1989; Collins 1995; Turner and Hester 1993). The Late Prehistoric period dates from 1250 to 260 B.P. (Collins 1995). Characteristic artifacts include small arrowpoints as well as a variety of specific use tools. The Austin and Toyah intervals of the Late Prehistoric, originally recognized by Suhm (1960) and Jelks (1962), remain ac-

cepted divisions for the period. These style intervals may represent distinct cultural entities (e.g., Johnson 1994), although others challenge this view (e.g., Black and Creel 1997).

During the earlier Austin interval, burned rock midden use may have reached its maximum based on recent conclusions by Black and Creel (1997). Characteristic arrow point types of the Austin interval include Scallorn and Edwards (Collins 1995; Turner and Hester 1993). By the Toyah interval, plainware ceramics appeared, indicating possible influence in the Central Texas region from ceramic producing cultures to the east and north (Perttula et al. 1995). Contrary to bog pollen data (Collins et al. 1993), data from Hall's Cave in Kerr County indicate that the climate of Central Texas began to dry around 1000 B.P. (Toomey et al. 1993). This drying trend may have resulted in a change in vegetation that made central and south Texas more conducive to bison migration into the area, and bison remains in archaeological sites in the region became common after 750 B.P. (Dillehay 1974; Huebner 1991).

Most Toyah sites have the distinctive Perdiz arrow point, and some sites also have bison processing tool kits. This technological change has been interpreted as the spread of an ethnic group by Johnson (1994) and as the spread of technological ideas in response to opportunities provided by an increased bison population in the Late Prehistoric by Ricklis (1992). Increasing complexity in subsistence patterns and very high prehistoric populations are postulated for the Late Prehistoric period (Black 1989; Collins 1995).

HISTORIC PERIOD

The Historic period (beginning ca. 260 B.P. or A.D. 1690) differs from the prehistoric periods in that it can be investigated from both archaeological remains and documentary re-

cords. From just after A.D. 1550 to the late 1600s, European incursions into South and Central Texas were rare, and the first Europeans did not settle in the region until around A.D. 1700 (Taylor 1996). Although the Historic period theoretically begins in Texas with the arrival of Alvar Nuñez Cabeza de Vaca and the survivors of the Narvaez expedition along the Texas coast in 1528, the bulk of the inhabitants were Native Americans until the late eighteenth century. Documents from Spanish incursions into the region from the late seventeenth century on left valuable information on native groups and tribes. One such group, the Payaya, lived in the area of the modern city of San Antonio and are described as a hunting and gathering group organized in extended family units camping near springs and streams where nuts, pecan trees, and woods were abundant. Bison were hunted on open grasslands between the San Antonio and Colorado Rivers for their meat and hides (Hester 1989:80). The Payaya may have occupied several sites in a roughly 50 km "summer" range and had occasional contact with other groups as they traveled to and from recamps source seasonally (Campbell 1983:349-351).

The Payaya sought protection from the Apache at newly established Spanish missions, settlements, and presidios like the Mission San Antonio de Valero (the Alamo) and the Presidio San Antonio de Bexar founded on May 5, 1718, by Don Martín de Alarcón near the headwaters of San Pedro Creek (Chipman 1992:117). The Spanish in turn, actively recruited the Native Americans to help bolster their settlements on this northern frontier in response to French incursions led by La Salle. The Spanish presence around San Antonio is best seen as part of the complex European political picture of the time. Spearheading the renewed Spanish interest with leadership and funding was the captain, general and governor of Coahuila and Texas, Joseph de Azlor v

Virto de Vera, Marques de San Miguel de Aguayo, who established San Antonio as the regional hub of northern Spanish settlement in Texas at this time (Cox 1997; Fox 1989).

After the establishment of San Antonio in the 1720s, the settlement effectively developed into a provincial Spanish town in the eighteenth century. In the early nineteenth century, the viceroyalty of New Spain gained independence from the Spanish empire partly due to the Napoleonic invasion of Spain, and the nation of Mexico was born. To help facilitate settlement of Texas, the region was opened up to Anglo settlers from the United States led by Stephen F. Austin. Eventually, this led to an independence movement by Texas area Anglo and Mexican citizens in the 1830s (Fox 1989). The well-known story of the battle of the Alamo and Texas independence is beyond the scope of discussion here, but the city of San Antonio played an integral part for both Mexican and Texan forces during the War for Texas Independence. Following this period, San Antonio remained a significant provincial city, growing and developing under Mexican, Texan, and American national policy in the nineteenth century (Fox 1989).

Anglo-period settlement began in the nineteenth century with significant historical events including the initial 1820s settlements, the Texas War for Independence in 1836, the incorporation of the Republic of Texas into the United States in 1845, the War with Mexico a few years after incorporation, and the U.S. Civil War of 1861–1865. During the War with Mexico, San Antonio served as a major hub for General Zachary Taylor's invasion of Mexico. Many of the military commanders of the U.S. Civil War were stationed and operated out of San Antonio at this time (Taylor 1996). San Antonio also served as a communications and shipping hub for goods imported from Mexico for the Confederate war effort in the early 1860s (Taylor 1996).

The first railway came through the city in 1877, bringing with it a plethora of job opportunities and commercial ventures. The railroad brought about a large shift in settlement patterns, as the eastern neighborhoods which were once multi-ethnic, became popular among African-Americans who worked as porters, mechanics, and loading crews for the growing railways. Wealthy citizens moved from the noise and traffic of downtown to quieter suburbs to the north and west. Through the 1880s and 1890s, as the economy of the city prospered through tourism, population of the city doubled from 53,321 to over 100,000 people (Fox et al. 1997:31).

Throughout the early twentieth century, trade, transportation, and tourism continued to bring economic prosperity to the city. The establishment of Fort Sam Houston and the activity surrounding World War I and World War II kept the railway system active and commercial activity in the east prospered. Through the remainder of the twentieth century, the city expanded rapidly but the downtown portion retained the city plan established in the nine-teenth century.

METHODS

BACKGROUND REVIEW

An SWCA archaeologist reviewed the Culebra Hill and Helotes, Texas (2998-243 and 2998-312) USGS 7.5-minute topographic quadrangle maps at the Texas Archeological Research Laboratory (TARL) and searched the Texas Archeological Sites Atlas online database for any previously recorded surveys and historic or prehistoric archaeological sites located in or near the project area. In addition to identifying recorded archaeological sites, the review included information on the following types of cultural resources: National Register of Historic Places (NRHP) properties, State Archeological Landmarks (SAL),

Official Texas Historical Markers, Registered Texas Historic Landmarks, cemeteries, and local neighborhood surveys. The archaeologist also examined the Soil Survey of Bexar County, Texas (Taylor et al. 1991) and the Geologic Atlas of Texas-San Antonio Sheet (Barnes 1983). Aerial photographs were reviewed as well, to assist in determining whether any standing buildings or structures are located on or near the project area.

FIELD METHODS

During the current investigations, two SWCA archaeologists conducted an intensive archaeological pedestrian survey of the project area, with particular focus paid to drainages and adjacent terraces and slopes. The investigations included ground surface inspection and shovel tests. The ground surface inspection involved walking the entire proposed project area, investigating extensive surface exposures and noting any artifact concentrations or scatters. The subsurface investigations involved shovel testing in compliance with the recommended THC standards. In areas with a potential for buried deposits, these standards instruct there shall be two shovel tests for every acre. In sections of the project area lacking the potential for buried deposits, exhibiting a high percentage of surface visibility, and encountering disturbed and displaced soils the number of shovel tests excavated was reduced or eliminated. In total, seven shovel tests were performed in areas displaying the potential to contain intact deposits.

The shovel tests were spaced approximately 35-40 meters (m) apart on parallel survey transects. All shovel tests were approximately 30 cm in diameter and excavated in 10 cm arbitrary levels to culturally sterile deposits. The soil unearthed from the shovel tests was screened through ¼-inch mesh screen to recover any cultural materials. GPS points were taken at the location of each shovel test. In

addition, each shovel test was recorded and documented on a standardized form. Any discovered archeological sites were defined and recorded following standard federal and state guidelines. All recorded sites were mapped in detail and plotted on USGS 7.5-minute topographic maps with a GPS unit and appropriate project maps for planning purposes. The current investigations were documented with digital photographs as well. Artifacts were analyzed and documented in the field and none were collected.

RESULTS

BACKGROUND REVIEW

The results of the background review determined that the project area has not been previously surveyed for cultural resources and no previously recorded sites are located within the project area location. However, there are four previously conducted surveys, one previously conducted testing project, and five cultural resources sites located within a one mile radius of the project area

PREVIOUS SURVEYS

Previously conducted surveys adjacent to the project area include a survey performed on Culebra Road (FM 471) and a survey along Culebra Creek for a sewer pipeline. The Culebra Road survey was conducted by Texas Department of Transportation (TxDOT) in 1985. The survey along Culebra Creek was conducted for the San Antonio Water System (SAWS) in 2002 (Ahr and Ducke 2002). The SAWS survey documented one site, 41BX1465, just west of the project area.

Surveys within one mile of the project area include a survey performed along Loop 1604 and survey performed by the Center of Archeological Research at the University of Texas at San Antonio (CAR/UTSA) on pri-

vate property. The survey encountered site 41BX126 located approximately 0.6 miles northwest of the project area. The site was later tested by TxDOT and CAR/UTSA in 1993, 1995, and 1997 (Nickels et al. 2001).

The survey on private property is located west of Loop 1604 approximately 0.8 miles northwest of the project area. The survey was conducted in 2001 by CAR/UTSA on behalf of the private owner. The survey documented three sites and two (41BX1423 and 41BX1424) are within 1 mile of the project area.

PREVIOUS SITES

There is one previously recorded site adjacent to the project area and four within 1 mile. Site 41BX1465 was recorded during the SAWS survey and is located just west of the project area within the Korean Baptist Church property (Ahr and Duke 2002) (Figure 2). The site was originally recorded as a prehistoric open campsite/lithic quarry site situated on a terrace overlooking Culebra Creek covering an 8400 m² area with dimensions of 70 m north-south and 120 m east-west. The site was described as a flaked stone lithic scatter primarily composed of lithic debris, including flakes and cores, produced from the early core reduction of the naturally occurring chert raw material source available in the area (Ahr and Duke 2002). The investigations of the site during the SAWS survey of the "Western Watershed Relief W-Extension-A Sewer Pipeline" project, which included ground surface inspection and two judgmental shovel tests, revealed that the site was mostly surficial with shovel tests exhibiting shallow deposition, between 10-20 cm, overlying bedrock atop the terrace. Additionally, these investigations encountered multiple disturbances to the site, including landscaping, a paved parking lot, evidence of fill activities, as well as bioturbation and natural erosion. The SAWS survey report also mentions that the subsurface at the terrace margin

exhibits evidence of fill activities, such as large asphalt fragments extending out of the edge of the terrace until approximately 50 cm below surface (cmbs), with limestone bedrock occurring at approximately 80 cmbs (Ahr and Duke 2002). The survey determined the site's integrity had been compromised, it had a low research value, and there was no evidence of intact deposits according to the site form. The site was not considered eligible for the National Register of Historic Properties (NRHP) or as a State Archeological Landmark (SAL). The current survey determined the site boundaries extend into the project area (see below).

Site 41BX126, the Culebra Creek site, is located 0.6 miles northwest of the project area. The prehistoric campsite was extensively tested and contained materials dating from 4,000 to 7,000 years old. No further work was required after testing investigations (Nickels et al. 2001).

Sites 41BX1423 and 41BX1424 are located approximately 0.8 miles northwest of the project area. Site 41BX1423 is a burned rock midden that has been heavily disturbed by looting, and utility and road construction. No further work was recommended. Site 41BX1424 consists of a scatter of unmodified debitage and cores. Although the site contained a large artifact assemblage with possible research value, further work was not recommended.

Site 41BX327 is located 0.7 miles southeast of the project area. The site was recorded in 1977 and consisted of mammoth bone remains from the Middle Pleistocene. The recorders noted that the site was being destroyed by quarrying activities and further work was not recommended.

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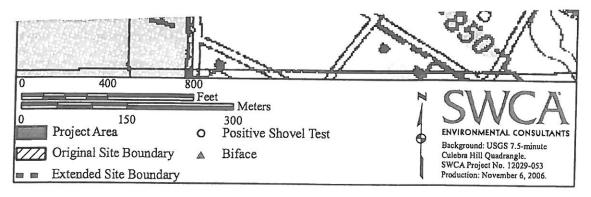


Figure 2. Project area map showing previously recorded 41BX1465, extended site boundary, and disturbances.

FIELD SURVEY

On October 19, 2006, two SWCA archaeologists conducted an intensive archaeological pedestrian survey of the project area. The survey determined the project area is situated along an upland landform and alluvial terrace south of and overlooking Culebra Creek (Figure 3). Investigations of the alluvial terrace revealed a nearly level topography with Quaternary age fluviatile terrace deposits. The deeper soil deposits are evident along the southern and southwestern sections of the project area, becoming shallower approaching the northern and northeastern sections. The terrace break was evident adjacent to the northwestern boundary near a two-track road/trail, which is aligned roughly northwest to southeast.

The investigations revealed an overall ground surface visibility between 50-70 percent. The western/southwestern portions of the project area contain a dense vegetation consisting of mixed hardwoods with an abundant amount of ground cover in the form of short grasses and leaf cover, and a surface visibility ranging from 0-10 percent. The northeastern/eastern portions of the project area consist of a quarry and gravel pit area with cleared vegetation, and a surface visibility ranging from 90-100 percent. The observed disturbances to the project area consist of truncated and displaced soils due to the quarry and gravel pit area, the two-track road/trail, vegetation clearing, and fence lines, as well as natural disturbances associated with bioturbation and natural erosion (Figure 4).

A total of seven shovel tests were excavated approximately 35-40 meters apart in areas with the potential for buried deposits within the project area (see Figure 2). The subsurface investigations predominantly revealed a 7.5YR 2.5/2 very dark brown silty loam overlying a 7.5YR 3/2 dark brown silty clay loam,

with an underlying 7.5YR 4/2 limy, brown clay subsoil (Table 1 and Figure 5). However, in areas with shallower deposition, such as with Shovel Test 3, some of these strata were not present. All of the shovel tests excavated were positive for cultural materials, specifically containing a total of 16 secondary and tertiary reduction stage chert lithic debitage flakes and flake fragments. The highest frequency of flakes occurred in Shovel Test 5 with a total of six flakes, while the remainder of the shovel tests contained between one to three flakes per test. Depths of the shovel tests ranged from 0-70 cmbs, encountering a cultural horizon between 0-50 cmbs (see Table 1).

In areas where shovel tests were not excavated, due to a high percentage of surface visibility, the low potential for buried deposits, and/or disturbed horizontally displaced and truncated soils, ground surface inspection revealed scatters of cultural materials on the surface. These inspections encountered sparse lithic debitage, mostly primary and secondary stages of reduction, lithic cores, and one biface fragment (Figure 6). This biface fragment is a middle stage with recent breaks. These were encountered mostly in the northern/northwestern section and beyond of the project area, as well as along the southeastern section.

The investigations revealed that the evidence of cultural materials within the project area are associated with an extension of the previously recorded site 41BX1465.

41BX1465

When SWCA archaeologists surveyed the current 6.8-acre project area for the Sea Island Shrimp House, a site was encountered throughout a large portion of the area both on the surface and subsurface. The site is located south of Culebra Creek and north of Culebra



Figure 3. Overview of project area facing west.



Figure 4. Overview of quarry/gravel pit area from Shovel Test 7 facing north/northeast.

Table 1. Shovel Test Data

Shove Test#	1	Depth (cmbs)	Munsell	Soil Color	Soil Texture	1	Cultural Materials	Comments
		0-30	7.5YR 2.5/2	Very dark brown	Silty loam	Roots; few pebbles/gravels	Negative	Clay content increasing with depth.
1	1 41BX 1465	30-60	7.5YR 3/2	Dark brown	Silty clay loam	Roots; moderate pebbles/gravels	Positive	1 flake fragment 30-50 cmbs
		60-70	7.5YR 4/2	Brown	Clay loam	Tiny limestone inclusions; few pebbles/gravels	Negative	Terminated in subsoil.
	2 41BX 1465	0-20	7.5YR 3/2	Dark brown	Silty loam	Roots, few pebbles/gravels	Positive	2 flakes 0-20 cmbs
2		20-40	7.5YR 4/2	Brown	Clay loam	Tiny limestone inclusions, few pebbles/gravels	Negative	Terminated in subsoil.
3	41BX 1465	0-12	7.5YR 4/2	Brown	Clay loam	Abundant limestone gravels, some tiny	Positive	3 flakes 0-12 cmbs; Terminated in subsoil.
		0-30	7.5YR 2.5/2	Very dark brown	Silty loam	Roots, few pebbles/gravels	Negative	Appears grayer
4	41BX 1465	30-50	7.5YR 3/2	Dark brown	Silty clay loam	Roots, few pebbles/gravels	Positive	1 flake 30-40 cmbs
		50-60	7.5YR 4/2	Brown	Clay toam	Tiny limestone inclusions, few pebbles/gravels	Negative	Terminated in subsoil
_		0-5	7.5YR 3/2	Dark brown	Silty clay loam	Roots; few pebbles/gravels	Positive	3 flakes 0-5 cmbs.
5	41BX 1465	5-20	7.5YR 4/2	Brown	Clay loam	Very rocky; limestone gravels	Positive	3 flakes 5-15 cmbs; Terminated in subsoil.
		0-20	7.5YR 2.5/2	Very dark brown	Silty loam	Roots; few pebbles/gravels	Positive	1 flake 0-20 cmbs.
6	41BX 1465	20-45	7.5YR 3/2	Dark brown	Silty clay loam	Roots, few pebbles/gravels	Doolling	1 flake 30-45 cmbs
		45-50	7.5YR 4/2	Brown	Clay loam	Small limestone inclusions	Negative	Terminated in subsoil.
_		0-5	7.5YR 3/2	Dark brown	Silty clay loam	Few pebbles/gravels	Donitivo	1 flake 0-5 cmbs.
7	41BX 1465	5-20	7.5YR 4/2	Brown	Clay loam	Very rocky; imestone gravels	Negative	Ferminated in subsoil.



Figure 5. Profile of Shovel Test 2.



Figure 6. Surficial artifacts, including a biface fragment, within southern/southeastern portion of project area.

Road on an upland landform and nearly level alluvial terrace of the creek. The cultural materials and artifact assemblage observed both on the surface and subsurface consist of flaked stone lithics, mainly flakes and cores, presumably from the locally available Edwards chert source. The surface materials consist of sparse scatters including mostly primary and secondary reduction stage flakes, as well as some cores, and one biface fragment. The subsurface materials consist of a total of 16 secondary and tertiary reduction stage flakes and flake fragments. There were no cultural features or temporally diagnostic artifacts observed.

These cultural materials within the project area are associated with an extension of the previously recorded site 41BX1465. The original boundaries of the site have been extended to connect with the site boundaries established in the current project area studies (see Figure 2). As a result, the site extends from west/northwest of the project area into a large portion of the project area moving towards the east/southeast. The site boundaries established during the current study encompass an approximately 28,000 m² area, with dimensions of approximately 160 m northsouth and 175 m east-west (Figure 7). Once the previous and current site boundaries are connected, the entire site area is approximately 52,000 m², with dimensions at approximately 160 m north-south and 325 m east-west. The boundaries for 41BX1465 within the project area are clearly defined along the northwestern, western, and southern boundaries. However, the site has been disturbed and truncated along the northeastern and eastern boundaries due to the quarry and gravel pit activities, and it is in a disturbed and secondary context in the vicinity of and within these areas. Therefore, the boundaries for 41BX1465 within the project area along the northeastern and eastern boundaries, as clear as can be defined, are delineated by the large

area of disturbance, in which cultural materials are significantly decreased and/or are no longer evident. Other disturbances to the site noted within the project area are a two-track road/trail, vegetation clearing, fence lines, bioturbation, and natural erosion. Similar to the results of the previous site recorders, site 41BX1465 was found to have a low research potential due to a low frequency of artifacts, no cultural features or temporally diagnostic artifacts, and extensive disturbances.

SUMMARY AND RECOMMENDATIONS

On behalf of Sea Island Shrimp House, SWCA conducted a cultural resources survey of the Culebra Road and Loop 1604 6.8-acre development tract in northwestern Bexar County, Texas. The investigations, conducted in compliance with the City of San Antonio's Historic Preservation and Design Section of the Unified Development Code, consisted of an archaeological background records and literature review and an intensive pedestrian survey. These investigations were aimed to determine if the proposed project would affect any significant cultural resources.

The results of the background review determined that the project area had not been previously surveyed for cultural resources and no previously recorded sites are located within the project area location. However, previously recorded site 41BX1465 is located just west of the project area. The current investigations revealed the project area is mostly within an upland landform and nearly level alluvial terrace south of and overlooking Culebra Creek with Quaternary age fluviatile terrace deposits. These areas have a moderate probability for the occurrence of significant cultural resources. The THC standards call for two shovel tests per every acre in areas with a potential for buried deposits. A total of seven shovel tests were excavated in such areas. In sections of the project area lacking the poten-

Site Map

41BX1465



IMAGE

REDACTED

Positive Shovel Test

TTTTTT Dirt Road

- Contour Line

-x-x- Fenceline

Site Boundary

0	Meters

SWEDWINGOWENTAL CONSULTANTS

Culebra Road (SH 471)

Boundary

14/4/

Figure 7. Site map of 41BX1465 within the project area.

tial for buried deposits, exhibiting a high percentage of surface visibility, and encountering disturbed and displaced soils, only ground surface inspection was utilized. Both the ground surface inspection and the shovel tests revealed a large portion of the project area contains cultural resources, specifically an extension of previously recorded site 41BX1465.

Site 41BX1465 extends east/southeast into a large portion of the project area until it is truncated by a quarry and gravel pit area along the northeastern/eastern section of the project area. The site, an unknown prehistoric open campsite/lithic quarry site, is associated with flaked stone lithics, particularly lithic debitage and cores, and one biface lithic tool within the project area. There were no cultural features or temporally diagnostic artifacts identified in the site within the project area.

Based on the results of the survey, although cultural materials associated with 41BX1465 were encountered both in the shovel tests and on the ground surface throughout a large portion of the project area, the site is lacking integrity. There is a generally low frequency of artifacts (< 50), and there are no cultural features or temporally diagnostic artifacts associated with the site within the project area. Additionally, there have been extensive disturbances to the site, as well as the project area. Therefore, the site's information potential is severely limited and it is not considered significant. Based on the results of the survey, SWCA recommends that there are no significant cultural resources in the Sea Island Shrimp House commercial development tract. No additional archaeological investigations are recommended. In the event that unanticipated archaeological resources are encountered during construction, work in the immediate area will cease and post-review discovery procedures will be initiated.

REFERENCES

Acuña, Laura I.

2006 Cultural Resources Constraints
Analysis of the Culebra Road and
Loop 1604 6.8-acre Property in
Bexar County Texas. SWCA Environmental Consultants, Austin,
Texas.

Ahr, Stephen W., and Daron Duke

2002 Archeological Survey for the San Antonio Water System Western Watershed Relief W-Extesnion-A Sewer Pipeline, San Antonio, Texas. Miscellaneous Reports of Investigations Number 241. Geo-Marine, Inc., San Antonio, Texas.

Barnes, Virgil E.

1983 Geological Atlas of Texas, San Antonio Sheet. Bureau of Economic Geology, The University of Texas at Austin.

Bement, L. C.

1991 Hunter-Gatherer Mortuary Practices
During the Archaic in Central Texas.
Unpublished Ph.D. dissertation, The
University of Texas at Austin.

Black, S. L.

1989 Central Texas Plateau Prairie. In From the Gulf to the Rio Grande: Human Adaptation in Central, South, and Lower Pecos Texas, by T. R. Hester, S. L. Black, D. G. Steele, B. W. Olive, A. A. Fox, K. J Reinhard, and L. C. Bement, pp. 17–36. Research Series No. 33 Arkansas Archaeological Survey, Fayetteville.

Black, S. L., and D. G. Creel

Midden Reconsidered. In Hot Rock Cooking on the Greater Edwards Plateau: Four Burned Rock Midden Sites in West Central Texas, Volume I, by S. L. Black, L. W. Ellis, D. G. Creel, and G. T. Goode, pp. 269–301. Studies in Archeology 22. Texas Archeological Research Laboratory, The University of Texas at Austin. Archeology Studies Program, Report 2. Texas Department of Transportation, Environmental Affairs Division, Austin, Texas.

Campbell, T. N.

1983 Coahuiltecans and Their Neighbors. In *Handbook of North American Indians*, Vol. 10, edited by W. C. Sturtevant, pp. 343–358. Smithsonian Institution, Washington, D.C.

Chipman, D. E.

1992 Spanish *Texas*, 1519–1821. University of Texas Press, Austin, Texas.

Collins, M. B.

1995 Forty Years of Archeology in Central Texas. *Bulletin of the Texas Archeological Society* 66:361–400.

Collins, M.B., C. B. Bousman, and T. K. Perttula

1993 Historic Context: Quaternary Environments and Archeology in Northeastern Texas. In Archeology in the Eastern Planning Region, Texas: A Planning Document, edited by N. A. Kenmotsu and T. K. Perttula, pp. 49–67. Cultural Resource Management Report 3. Department of Antiquities Protection, Texas Historical Commission, Austin.

Cox, I. W.

1997 The Growth of San Antonio. In Archaeology at the Alamodome: Investigations of a San Antonio Neighborhood in Transition, Vol. I, Historical Architectural, and Oral History Research, edited by A. A. Fox, M. Renner, and R. J. Hard, pp. 8–44. Archaeological Survey Report, No. 236. Center for Archaeological Research, The University of Texas at San Antonio.

Dillehay, T. D.

1974 Late Quaternary Bison Population Changes on the Southern Plains. *Plains Anthropologist* 19(65):180–196.

Fox, A. A.

1989 Historic Anglo-European Exploration and Colonization, in From the Gulf to the Rio Grande: Human Adaptation in Central, South, and Lower Pecos Texas, by T. R. Hester, S. L. Black, D. G. Steele, B. W. Olive, A. A. Fox, K. J. Reinhard, and L. C. Bement, pp. 85–92. Research Series No. 33. Arkansas Archeological Survey, Fayetteville.

Fox, A., M. Renner, and R. Hard

1997 Archaeology at the Alamodome: Investigations of a San Antonio Neighborhood in Transition, Volume 1- Historical, Architectural, and Oral History Research. Archaeological Survey Report, No. 236. Center for Archaeological Research, the University of Texas at San Antonio, San Antonio.

Gould, F. W.

1975 Texas Plants: A Checklist and Ecological Summary. Texas Agricultural Experimentation Station, College Station, Texas.

Hester, T. R.

1989 Historic Native American Populations. In From the Gulf to the Rio Grande: Human Adaptation in Central, South, and Lower Pecos Texas, by T. R. Hester, S. L. Black, D. G. Steele, B. W. Olive, A. A. Fox, K. J. Reinhard, and L. C. Bement, pp. 77–84. Research Series No. 33. Arkansas Archeological Survey, Fayetteville.

1995 The Prehistory of South Texas.

Bulletin of the Texas Archeological
Society 66:427-459.

Howard, C. D.

1974 Paleo-Indian Surface Finds in Bexar County. *La Tierra* 1(4):14-17.

Huebner, J. A.

1991 Late Prehistoric Bison Populations in Central and Southern Texas. *Plains Anthropologist* 36(137):343–358.

Jelks, E. B.

1962 The Kyle Site; a Stratified Central Texas Aspect Site in Hill County, Texas. Department of Anthropology, University of Texas, Austin, Texas.

Johnson, L.

1994 The Life and Times of Toyah-Culture Folk: The Buckhollow Encampment, Site 41KM16, Kimble County, Texas. Report 38. Office of the State Archeologist, Austin, Texas.

Johnson, L. and G. Goode

1994 A New Try at Dating and Characterizing Holocene Climates, as well as Archaeological Periods, on the Eastern Edwards Plateau. Bulletin of the Texas Archeological Society 65:1–15.

McKinney, W. W.

1981 Early Holocene Adaptations in Central and Southern Texas: The Problem of the Paleo-Indian-Archaic Transition. Bulletin of the Texas Archeological Society 52:91-120.

Metzer, D. J. and M. R. Bever

1995 Paleoindians of Texas: An Update on the Texas Clovis Fluted Point Survey. Bulletin of the Texas Archeological Society 66:47-81.

Nickels, D. L., C. B. Bousman, J. D. Leach, and D. A. Cargill

1998 Testing Excavations at the Culebra Creek Site, 41BX126, Bexar County, Texas. Archaeological Survey Report, No. 265, Center for Archaeological Research at the University of Texas at San Antonio. Archeology Studies Program, Report 3, Environmental Affairs Division, Texas Department of Transportation.

Pertulla, T. K., M. R. Miller, R. A. Ricklis, D. J. Prikryl, and C. Lintz

1995 Prehistoric and Historic Aboriginal Ceramics in Texas. Bulletin of the Texas Archeological Society 66:175– 235.

Ricklis, R. A.

1992 The Spread of the Late Prehistoric Bison Hunting Complex: Evidence from the South-Central Coastal Prairie of Texas. *Plains Anthropologist* 37(140):261–273.

Suhm, E. A.

1960 A Review of Central Texas Archaeology. Bulletin of the Texas Archaeological Society 29:63–108.

Taylor, R. (editor)

1996 The New Handbook of Texas in Six Volumes. The Texas State Historical Association, Austin.

Taylor, F.B., R. B. Hailey, and D. L. Richmond

1991 Soil Survey of Bexar County, Texas.
Soil Conservation Service, U.S. Department of Agriculture, Washington,
D. C.

Toomey, R. S., III, M. D. Blum, and S. Valastro, Jr.

1993 Late Quaternary Climates and Environments of the Edwards Plateau, Texas. Global and Planetary Change 7:299–320.

Turner, E. S., and T. R. Hester

1993 A Field Guide to Stone Artifacts of Texas Indians. Second Edition. Texas Monthly Field Guide Series. Gulf Publishing Company, Houston, Texas.

Van Auken, O. W.

1988 Woody Vegetation of the Southern Escarpment and Plateau. In Edwards Plateau Vegetation: Plant Ecological Studies in Central Texas, edited by B. B. Amos and F. R. Geilbach, pp. 43–55. Baylor University Press, Waco.